

REMARKS

The present amendment is respectfully submitted in response to the outstanding Office Action of November 5, 2003 on the above-identified application. Entry of the amendment, and a reconsideration of the claims as amended, are respectfully requested.

Claims 1 and 3 through 25 are pending in the application. In the action, all claims were rejected on the basis of the prior art.

Before considering the Office Action in greater detail, it will be noted that claim 1 has been amended above to more clearly point out the present invention and to distinguish it from the prior art. Support for the amendment may be found most clearly in the drawings. With reference to Figure 1, the openings 15 in opposing lamella legs 11, 12 extend to two points on the longitudinal axis L offset from one another relative to the longitudinal axis. The result of this arrangement is a second connecting element 16 inclined relative to the longitudinal axis. The second connecting element being so inclined allows the strip to be compressed or extended relative to the longitudinal axis.

For purposes of illustration, reference is made to the attached Figures 1 through 3. These figures have been prepared by a method using finite elements. Based on the embodiment shown in Figure 1 of the present application, the attached figures show the strain within the respective parts of the metal strip. Figure 1 shows the situation where a tensile force in the amount of 30 Newton is applied to both ends of the strip. Such a tensile force does not lead to a lengthening of this metal strip. Figure 2 shows the same metal strip but with a tensile force in the amount of 200 Newton. This results in a lengthening of the strip, in particular, by a deformation of the second element. Figure 2 clearly shows that the angle of inclination of the second element with respect to the longitudinal axis changes so that the second element becomes

more oriented toward the longitudinal axis of the metal strip. Figure 3 shows the metal strip where instead of a tensile force a compression force is applied. The length of the metal strip is thereby reduced. In particular, the second connecting element is deformed into the shape of an "S".

From the attached Figures 1 through 3 one can clearly see that, due to the shape of the second connecting element which is inclined relative to the longitudinal axis, the metal strip can be lengthened and compressed. This is particularly due to the inclination of the second connecting element which by a tensile force or a compression force changes correspondingly.

Turning now to page 2 of the action, the Examiner will find enclosed herewith certified copies of German Patent Applications Nos. DE 100 16 199.5, filed March 31, 2000, and DE 100 33 454.7, filed July 10, 2000 to substantiate the priority claim previously made by the Applicant.

Referring to page 3 of the action, claims 1, 3 through 21, 24 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable for obviousness over Davis et al. (U.S. Patent No. 5,302,466).

Davis et al. shows a continuous strip of sheet metal being progressively sheared with longitudinally spaced and laterally extending slits to form opposing U-shaped tabs having corresponding edge portions and are successively connected by corresponding center portions of the strip. As shown in Figure 8, the expanded elongated metal strip comprises V-shaped tabs with diverging leg portions which define longitudinally spaced teardrop-shaped openings. These openings do not extend to the longitudinal axis of the strip, which accordingly has a continuous center portion.

Davis et al. neither shows nor suggests the invention set forth in claim 1 amended above. As claimed, the openings in opposing lamella legs extend to the longitudinal axis, and are offset from one another with respect to the longitudinal axis, to produce the second connecting elements which are inclined relative to the longitudinal axis. As the openings in Davis et al. do not extend to the longitudinal axis, the portion of the strip between them is not inclined. Moreover, there is no teaching or suggestion that the openings be longitudinally offset from one another. Accordingly, even if they were to extend closer to the longitudinal axis, they would not produce the claimed second connecting elements. Finally, even if the openings in Davis et al. were reversed, they would not provide the claimed second connecting element for the same reason.

Claim 1 is respectfully submitted to be patentable over Davis et al. The claimed second connecting element allows the strip to be compressed or expanded relative to the longitudinal axis. This is a surprising result which is not obtainable with the strip shown in Davis et al. Claims 3 through 25, all ultimately dependent from claim 1, are submitted to be patentable as further limiting the subject matter claimed in claim 1.

Referring to page 6 of the action, claims 1, 19, 22 and 23 were rejected as being unpatentable for obviousness over Hein (U.S. Patent No. 4,348,443). The arguments made above are equally applicable here. Hein shows a strip having a continuous center portion, and neither shows nor suggests the invention set forth in claim 1 amended above. As set forth in claim 1, the openings in opposing lamella legs extend to the longitudinal axis, and are offset from one another with respect to the longitudinal axis, to produce the second connecting elements which are inclined relative to the longitudinal axis. As the openings in Hein do not extend to the longitudinal axis, the portion of the strip between them is not so inclined.

Moreover, there is no teaching or suggestion in Hein that the openings be longitudinally offset from one another. Accordingly, even if they were to extend closer to the longitudinal axis, and even if they were reversed so that their apexes were oriented toward the longitudinal axis, they would not produce the claimed second connecting elements.

Claim 1 is respectfully submitted to be patentable over Hein. Again, the second connecting element set forth in the claim allows the strip to be compressed or expanded relative to the longitudinal axis. This surprising result cannot be obtained with the strip shown in Hein. Claims 19, 22 and 23, all ultimately dependent from claim 1, are submitted to be patentable as further limiting the subject matter claimed in claim 1.

An early allowance of claims 1 and 3 through 25 is respectfully requested and earnestly sought.

Respectfully submitted,



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